

## REMARKS

Claims 1 and 3-13 are pending in the application and have been rejected. Claims 1, 5, and 10 have been amended. Reconsideration and allowance of Claims 1 and 3-13 in view of the above amendments and following remarks is respectfully requested.

### The Rejection of Claims 1, 3, 4, and 10-13 Under 35 U.S.C. § 112, Second Paragraph

Claims 1, 3, 4, and 10-13 stand rejected under 35 U.S.C. § 112, second paragraph, as indefinite. The Examiner states that it is unclear whether the fibers have been treated with a bleaching agent prior to, during, or after crosslinking. Applicants believe that the claim language ("polyacrylic acid crosslinked cellulosic fibers treated with a bleaching agent") is definite and makes clear that polyacrylic acid crosslinked fibers are treated with a bleaching agent (i.e., the fibers are treated with a bleaching agent after having been crosslinked with polyacrylic acid). Applicants note that this meaning is consistent with the specification and Claim 5 directed to the method for making bleached polyacrylic acid crosslinked fibers. Withdrawal of the rejection is requested.

### The Rejection of Claims 1, 5, and 10-12 Under 35 U.S.C. § 102(b)/103

Claims 1, 5, and 10-12 stand rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious in view of U.S. Patent No. 5,549,791, issued to Herron et al., as evidenced by U.S. Patent No. 4,822,453, issued to Dean et al. Withdrawal of the rejection is requested for the following reasons.

Independent Claims 1, 5, and 10 have been amended.

Claims 1 and 10 have been amended to recite that the bleached polyacrylic acid crosslinked fibers have a Whiteness Index that increases from a first value determined initially after treatment with the bleaching agent to a second value determined up to 14 days after treatment. Neither of the cited references describes a fiber having a Whiteness Index that

LAW OFFICES OF  
CHRISTENSEN O'CONNOR JOHNSON KINDNESS<sup>PLLC</sup>  
1420 Fifth Avenue  
Suite 2800  
Seattle, Washington 98101  
206.682.8100

increases from an initial value after treatment to a second value determined up to 14 days after treatment.

The increase in Whiteness Index over time exhibited by the polyacrylic acid crosslinked fibers of the invention results from the method for making these fibers. In the method, polyacrylic acid crosslinked fibers are sprayed with the bleaching agent. The applied bleaching agent in contact with the fibers increases the Whiteness Index of the fibers from a first value as determined initially after treatment to a second value determined up to 14 days after treatment. See, for example, Table 2. Whiteness Index increases as the bleaching agent acts on the fibers to which it is applied up to the point where the applied bleaching agent is depleted.

Because the cited references fail to exactly describe the invention as now claimed, the references are not anticipatory. Withdrawal of this rejection with regard to Claims 1 and 10-12 is respectfully requested. Furthermore, the cited references fail to teach, suggest, or otherwise render obvious the invention as now claimed.

Claim 5 has been amended to recite that the method for making bleached polyacrylic acid crosslinked fibers comprises spraying a bleaching agent into an air stream containing polyacrylic acid crosslinked fibers. Support for the amendment can be found throughout the application as originally filed. See, for example, page 7, lines 19-21.

The Herron reference fails to teach or suggest any method for applying a bleaching agent to fibers. The Dean reference describes conventional multi-stage bleaching sequences for bleaching fibers (see Col. 17, lines 33-58). Neither reference describes, teaches, or suggests spraying a bleaching agent into an air stream containing fibers, as in the claimed invention.

Because the cited references fail to exactly describe the invention as now claimed, the references are not anticipatory. Withdrawal of this rejection with regard to Claim 5 is

LAW OFFICES OF  
CHRISTENSEN O'CONNOR JOHNSON KINDNESS<sup>PLLC</sup>  
1420 Fifth Avenue  
Suite 2800  
Seattle, Washington 98101  
206.682.8100

respectfully requested. Furthermore, the cited references fail to teach, suggest, or otherwise render obvious the invention as now claimed.

The Rejection of Claims 3, 4, and 6-9 Under 35 U.S.C. § 103(a)

Claims 3, 4, and 6-9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,549,791, issued to Herron et al., in view of U.S. Patent No. 5,562,740, issued to Cook et al. Withdrawal of the rejection is requested for the following reasons.

Claims 3 and 4 depend from Claim 1, and Claims 6-9 depend from Claim 5. Claims 1 and 5 have been amended.

Regarding Claims 3 and 4, which depend from Claim 1, as noted above, the Herron reference fails to teach or suggest bleached polyacrylic acid crosslinked fibers having a Whiteness Index that increases from a first value determined initially after treatment with the bleaching agent to a second value determined up to 14 days after treatment. The deficiencies of the teaching of the Herron reference are not cured by the teaching of the Cook reference. The Cook reference similarly fails to teach or suggest a fiber having a Whiteness Index that increases over time. Accordingly, the combined teachings of the cited references fail to teach or suggest the invention as now claimed.

Regarding Claims 6-9, which depend from Claim 5, as noted above, the Herron reference fails to teach or suggest a method for making bleached polyacrylic acid in which polyacrylic acid crosslinked fibers are sprayed with the bleaching agent. The deficiencies of the teaching of the Herron reference are not cured by the teaching of the Cook reference. The Cook reference similarly fails to teach or suggest a method in which polyacrylic acid crosslinked fibers are sprayed with the bleaching agent. Accordingly, the combined teachings of the cited references fail to teach or suggest the invention as is now claimed.

Because the cited references, either alone or in combination, fail to teach, suggest, provide any motivation to make, or otherwise render obvious the invention as is now claimed, the claimed invention is nonobvious and patentable over the cited references. Withdrawal of the rejection is respectfully requested.

The Rejection of Claim 13 Under 35 U.S.C. § 103(a)

Claim 13 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,549,791, issued to Herron et al., in view of U.S. Patent No. 5,562,740, issued to Cook et al., and further in view of Wang et al. (2002/0157189) Withdrawal of the rejection is requested for the following reasons.

Claim 13 depends from Claim 1, which has been amended.

As noted above, the Herron reference fails to teach or suggest bleached polyacrylic acid crosslinked fibers having a Whiteness Index that increases from a first value determined initially after treatment with the bleaching agent to a second value determined up to 14 days after treatment. The deficiencies of the teaching of the Herron reference are not cured by the teachings of the Cook and Wang references. The Cook and Wang references similarly fail to teach or suggest a fiber having a Whiteness Index that increases over time. Accordingly, the combined teachings of the cited references fail to teach or suggest the invention as now claimed.

Because the cited references, either alone or in combination, fail to teach, suggest, provide any motivation to make, or otherwise render obvious the invention as is now claimed, the claimed invention is nonobvious and patentable over the cited references. Withdrawal of the rejection is respectfully requested.

The Provisional Obviousness-Type Double Patenting Rejection

Claims 1-4 and 10-12 have been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1, 9, and 10 of

LAW OFFICES OF  
CHRISTENSEN O'CONNOR JOHNSON KINDNESS<sup>PLLC</sup>  
1420 Fifth Avenue  
Suite 2800  
Seattle, Washington 98101  
206.682.8100

compending Application No. 10/815,206, in view of U.S. Patent No. 6,211,296, issued to Frate et al. Withdrawal of the rejection is requested for the following reasons.

Claims 1 and 10 have been amended. Claims 3 and 4 depend from Claim 1, and Claims 11 and 12 depend from Claim 10. As amended, Claims 1 and 10 recite that the bleached polyacrylic acid crosslinked fibers have a Whiteness Index that increases from a first value determined initially after treatment with the bleaching agent to a second value determined up to 14 days after treatment. Neither of the cited references teaches or suggests a fiber having a Whiteness Index that increases from an initial value after treatment to a second value determined up to 14 days after treatment.

Because the cited references fail to teach, suggest, provide any motivation to make, or otherwise render obvious the invention as now claimed, withdrawal of the rejection is respectfully requested.

#### CONCLUSION

In view of the above amendments and foregoing remarks, applicants believe that Claims 1 and 3-13 are in condition for allowance. If any issues remain that may be expeditiously addressed in a telephone interview, the Examiner is encouraged to telephone applicants' attorney at 206.695.1755.

Respectfully submitted,

CHRISTENSEN O'CONNOR  
JOHNSON KINDNESS<sup>PLLC</sup>



George E. Renzoni, Ph.D.  
Registration No. 37,919  
Direct Dial No. 206.695.1755

GER:md

LAW OFFICES OF  
CHRISTENSEN O'CONNOR JOHNSON KINDNESS<sup>PLLC</sup>  
1420 Fifth Avenue  
Suite 2800  
Seattle, Washington 98101  
206.682.8100